

# Measurement data monitoring system

testo Saveris

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Automated and uninterrupted measurement data recording

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Stationary and mobile data monitoring in one system

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Flexible system set-up with wireless or Ethernet probes in many probe versions

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Extensive alarm management

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Automatic creation of measurement data reports

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Integration of other further measurement parameters via standard interfaces

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The measurement data monitoring system testo Saveris monitors temperature and humidity values without interruption in wide-ranging measurement sites. Wireless and Ethernet probes allow versatile applications:

- Monitoring and documentation in Production, Quality Assurance and R & D
- Monitoring of the storage climate of valuable inventory, medicaments and foods
- Monitoring of the food cold chain

The Base is the heart of testo Saveris and can store 40,000 measurement values. The large selection of wireless probes allows a practically unlimited versatility of application.

The existing LAN structure can be used with the Ethernet probes. The Router improves wireless connection in unfavourable constructional situations. By connecting a Converter to an Ethernet socket, the signal from a wireless probe can be converted to an Ethernet signal: During transport, the Cockpit Unit shows the driver all measurement values without interruption and provides alarms when limit values are exceeded. The entire data record can be printed out using an infrared printer at the handover of the goods.

# testo Saveris system overview

## testo Saveris wireless probes

Probe versions with internal as well as external temperature and humidity sensors allow the adaptation to any application. The wireless probes are available optionally with or without display. The current measurement data, the battery status and the quality of the wireless connection are shown.



testo Saveris wireless probes

## testo Saveris Router

The use of a Router can improve or extend the wireless connection in difficult constructional circumstances. Several Routers in the testo Saveris system are of course possible. At the same time, the serial switching of up to 3 Routers V 2.0 provides the highest level of flexibility regarding wireless range.



testo Saveris Router

## testo Saveris Converter/Extender

By connecting a testo Saveris Converter or Extender to an Ethernet socket, the signal from a wireless probe can be converted into an Ethernet signal. This combines the flexible installation of a wireless probe with the exploitation of the existing Ethernet even over long transmission distances.



testo Saveris Converter V 2.0 /  
testo Saveris Extender



testo Saveris Analog Coupler (wireless)



testo Saveris Analog Coupler (Ethernet)



Humidity transmitter

## testo Saveris Analog Coupler

The two versions of the Analog Coupler (wireless/Ethernet) allow the integration of further measurement parameters into the testo Saveris monitoring system, by including all transmitters with standardized current/voltage interfaces, e.g. 4 to 20 mA or 0 to 10 V.

## Humidity and differential pressure transmitters testo 6651/6681/6351/6381/6383

The integration of the humidity and differential pressure transmitters allows control parallel to the measurement data monitoring. This offers the solution for highest accuracy as well as for special applications (high humidity, trace humidity etc.) in compressed air, drying and air conditioning technology.

**testo Saveris Base**

The Base is the heart of testo Saveris, and can store 40,000 measurement values per measurement channel independently of a PC. This corresponds to a storage capacity of approximately a year at a measurement rate of 15 minutes. System data and alarms are visible via the testo Saveris Base display.

**testo Saveris software**

All temperature and humidity values are collated and documented without interruption here. Depending on requirements, the software is available in three versions: as a basic version SBE (Small Business Edition), as an extended version PROF (Professional), or as a validatable CFR version. Operation is easy thanks to an intuitive user interface. And to round it all off, you can view the measurement data flexibly on various mobile end devices.



**testo Saveris Ethernet probes**

In addition to the wireless probes, probes can be used which can be directly connected to the Ethernet. This means that an existing LAN structure can be used, allowing the data transfer from probe to Base even over large distances.

**testo Saveris Extender**

By connecting a testo Saveris Extender, the wireless signal of a transport probe (mobile probe) is converted into an Ethernet signal. The data transfer from wireless probe to Extender takes place automatically when sufficient wireless connection is present.

**testo Saveris Cockpit Unit**

The testo Saveris Cockpit Unit displays all measurement values to the driver uninterruptedly during transport. If limit values are violated, the driver is immediately warned. Alternatively, the complete data recording can be printed out at the handover site of the goods using the Testo printer on the Cockpit Unit.

## Ordering data / Technical data

### testo Saveris Base

testo Saveris Base, radio frequency 868 MHz  
Part no. 0572 0220



testo Saveris Base, radio frequency 868 MHz,  
GSM module integrated (for SMS alarm)  
Part no. 0572 0221

### testo Saveris Cockpit Unit

testo Saveris Cockpit Unit  
incl. mini-USB-cable and  
adapter 12/24 V DC



Part no. 0572 0222

No mains units or aerials with magnetic base are contained in this ordering data.

Note on the radio frequencies: 868 MHz: EU countries and certain other countries (e.g. BR, CH, CN, NOR) Country list at [www.testo.com/saveris](http://www.testo.com/saveris)

#### testo Saveris Base

|                                     |  |
|-------------------------------------|--|
| Memory                              | 40,000 values per channel (total max. 18,000,000 values)   |
| Dimensions                          | 225 x 150 x 49 mm  |
| Weight                              | Approx. 1510 g   |
| Protection class                    | IP42   |
| Housing material                    | Diecast zinc / plastic   |
| Radio frequency                     | 868 MHz  |
| Power supply (absolutely necessary) | 6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, power consumption 4 W   |
| Rech. batt.*                        | Li-ion battery (for data back-up and for emergency SMS if power supply fails)  |
| Operating temperature               | +5 to +45 °C   |
| Storage temperature                 | -25 to +60 °C  |
| Display                             | graphical display, 4 control keys  |
| Interfaces                          | USB, radio, Ethernet   |
| Connectable radio probe             | max. 15 probes can be directly connected via wireless interface, max. 150 total via wireless / Router / Converter / Ethernet / Extender, max. 450 channels |
| Alarm relay                         | max. 1 A, max. 30 W, max. 60/25 V DC/AC, NC or NO contact  |
| GSM module                          | 850 / 900 / 1800 / 1900 MHz<br>not valid for Japan and South Korea   |
| Set up                              | Table base and wall bracket included   |
| Firmware version                    | 2.X  |

\*Wearing part

#### testo Saveris Cockpit Unit

|                                     |  |
|-------------------------------------|--|
| Memory                              | max. 20,000 measurement values   |
| Dimensions                          | Approx. 150 x 90 x 40 mm   |
| Weight                              | Approx. 210 g  |
| Protection class                    | IP30   |
| Housing material                    | Plastic  |
| Radio frequency                     | 868 MHz  |
| Power supply (absolutely necessary) | Mini-USB cable incl. adapter 12/24 V DC                                |
| Rech. batt.*                        | NiMH rechargeable battery (for securing data in case of power failure) |
| Operating temperature               | -30 to +65 °C  |
| Storage temperature                 | -40 to +85 °C  |
| Display                             | graphical display, 4 control keys                                      |
| Interfaces                          | Radio, USB, infrared   |
| Connectable radio probe             | up to 2 zones with 4 wireless probes each, max. 32 channels            |
| Attachment                          | Sucker pad with telescope function                                     |

\*Wearing part

# Router, Converter and Extender

## Part no.

|  |           |  |
|--|-----------|--|
| testo Saveris Router V 1.0, 868 MHz, radio transmission medium                             | 0572 0119 |  |
| testo Saveris Router V 2.0, 868 MHz, radio transmission medium                             | 0572 0219 |  |
| testo Saveris Converter V 1.0, 868 MHz, converts the radio transmission medium to Ethernet | 0572 0118 |  |
| testo Saveris Converter V 2.0, 868 MHz, converts the radio transmission medium to Ethernet | 0572 0218 |  |
| testo Saveris Extender 868 MHz, converts the radio transmission medium to Ethernet         | 0572 0217 |  |

No mains units are contained in this ordering data.

| Technical data          | testo Saveris router V 1.0   | testo Saveris Router V 2.0                      | testo Saveris converter V 1.0   | testo Saveris Converter V 2.0   | testo Saveris Extender   |
|-------------------------|--|---|---|---|--|
| Application             | · for testo Saveris Base Firmware Version V 1.X  | · for testo Saveris Base Firmware Version V 2.X | · for testo Saveris Base Firmware Version V 1.X<br>· only for wireless probes<br>Firmware Version 1.X   | · for all testo Saveris Base Firmware versions<br>· only for wireless probes<br>with Firmware Version 2.X | · for testo Saveris Base Firmware Version V 2.X<br>· only for wireless probes<br>with Firmware Version 2.X |
| Dimensions              | Approx. 85 x 100 x 38 mm   |   |   |   |  |
| Weight                  | Approx. 180 g  |   | Approx. 190 g   |   |  |
| Power supply            | 6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, power consumption < 0.5 W |   | 6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, PoE, power consumption < 2 W |   |  |
| Operating temperature   | -20 to +50 °C  |   |   |   |  |
| Storage temperature     | -40 to +60 °C  |   |   |   |  |
| Housing material        | Plastic  |   |   |   |  |
| Protection class        | IP54   |   |   |   |  |
| Interfaces              | Radio  |   | Radio, Ethernet   |   |  |
| Connectable radio probe | max. 5   |   | max. 15   |   | max. 15 m in stationary operation<br>max. 100 m in mobile operation  |
| Router cascading        | no   | yes   | -   | -   | -  |
| Wall bracket            | included   |   |   |   |  |

# Radio probes

## Version without display

## Part no.

|  |            |
|--|------------|
| testo Saveris T1 Radio probe with internal NTC, radio frequency 868 MHz, without display   | 0572 1210* |
| testo Saveris T2 Radio probe with external probe connection and internal NTC, door contact, radio frequency 868 MHz, without display                 | 0572 1211* |
| testo Saveris T3 2-channel radio probe with 2 external TC probe connections (choice of TC characteristics), radio frequency 868 MHz, without display | 0572 9212* |
| testo Saveris Pt Radio probe with 1 external Pt100 probe connection, radio frequency 868 MHz, without display  | 0572 7211* |

## Version with display

|   |            |
|---|------------|
| testo Saveris T1 D Radio probe with internal NTC, radio frequency 868 MHz, with display   | 0572 1220* |
| testo Saveris T2 D Radio probe with external probe connection and internal NTC, radio frequency 868 MHz, with display                               | 0572 1221* |
| testo Saveris T3 D 2-channel radio probe with 2 external TC probe connections (choice of TC characteristics), radio frequency 868 MHz, with display | 0572 9222* |
| testo Saveris Pt D Radio probe with 1 external Pt100 probe connection, radio frequency 868 MHz, with display  | 0572 7221* |

The alkali manganese batteries AA (0515 0414) are included in these ordering data (Analog Coupler excluded). testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

| Technical data                      | testo Saveris T1  | testo Saveris T2   | testo Saveris T3                                      |                                     | testo Saveris Pt   |
|-------------------------------------|---|--|---|-------------------------------------|--|
| <b>Internal sensor</b>              | Probe type  | <b>NTC</b>   | <b>NTC</b>  | -                                   | -  |
|                                     | Measuring range   | -35 to +50 °C  | -35 to +50 °C   | -                                   | -  |
|                                     | Accuracy  | ±0.4 °C (-25 to +50 °C)<br>±0.8 °C (remaining range)                                 | ±0.4 °C (-25 to +50 °C)<br>±0.8 °C (remaining range)  | -                                   | -  |
|                                     | Resolution  | 0.1 °C   | 0.1 °C  | -                                   | -  |
| <b>External probe</b>               | Probe type  | -  | <b>NTC</b>  | <b>TC type K</b> <b>TC type J</b>   | <b>Pt100</b>   |
|                                     | Measuring range (Instrument)  | -  | -50 to +150 °C  | -195 to +1350 °C    -100 to +750 °C | -200 to +600 °C  |
|                                     | Accuracy (Instrument)   | -  | ±0.2 °C (-25 to +70 °C)<br>±0.4 °C (remaining range)  | ±0.5 °C or 0.5% of m.v.             | at +25 °C<br>±0.1 °C (0 to +60 °C)<br>±0.2 °C (-100 to +200 °C)<br>±0.5 °C (remaining range) |
|                                     | Resolution (Instrument)   | -  | 0.1 °C  | 0.1 °C / TC type S 1 °C             | 0.01 °C  |
| Connection                          | -   | NTC via mini-DIN socket, door contact connection cable included in delivery (1.80 m) | 2 TCs via TC socket, max. difference in potential 2 V |                                     | 1 Pt100 via mini-DIN socket  |
| Dimensions (housing):               | 80 x 85 x 38 mm   |  |   |                                     |  |
| Weight                              | Approx. 240 g   |  |   |                                     |  |
| Battery life (Type: 4 AA batteries) | Battery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries |  |   |                                     |  |
| Housing material                    | Plastic   |  |   |                                     |  |
| Protection class                    | IP68  |  | IP54  |                                     | IP68   |
| Radio frequency                     | 868 MHz   |  |   |                                     |  |
| Measuring rate                      | Standard 15 min, 1 min to 24 h can be set   |  |   |                                     |  |
| Memory                              | 6,000 measurement values per channel  |  |   |                                     |  |
| Conformity with standards           | DIN EN 12830  |  | -   |                                     |  |
| Operating temperature               | -35 to +50 °C   |  | -20 to +50 °C   |                                     |  |
| Storage temperature                 | -40 to +55 °C (incl. batteries)   |  |   |                                     |  |
| Display (optional)                  | LCD, 2 lines; 7-segment with symbols  |  |   |                                     |  |
| Transmission distance               | approx. 300 m without obstruction at a frequency of 868 MHz   |  |   |                                     |  |
| Wall bracket                        | included  |  |   |                                     |  |

\*The testo Saveris Converter V 2.0 (order no. 0572 0218) is required for integration of testo Saveris wireless probes into systems with Base Firmware V 1.X. For more information please contact our customer hotline or your Testo partner.

# Radio probes

## Version without display

## Part no.

|   |            |  |
|---|------------|--|
| testo Saveris H3 Wireless probe with internal humidity sensor 3 %RH, radio frequency 868 MHz, without display   | 0572 6210* |  |
| testo Saveris U1 Wireless Analog Coupler with 1 current/voltage input, radio frequency 868 MHz, without display | 0572 3210* |  |

## Version with display

|  |            |  |
|--|------------|--|
| testo Saveris H2 D Wireless probe with external humidity sensor 2 %RH, radio frequency 868 MHz, with display     | 0572 6222* |  |
| testo Saveris H3 D Wireless probe with internal humidity sensor 3 %RH, radio frequency 868 MHz, with display     | 0572 6220* |  |
| testo Saveris H4 D Wireless probe with external humidity probe connection, radio frequency 868 MHz, with display | 0572 6224* |  |

The alkali manganese batteries AA (0515 0414) are included in these ordering data (Analog Coupler excluded). testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

| Technical data                      | testo Saveris H2 D  |               | testo Saveris H3   |               | testo Saveris H4 D                          |               | testo Saveris U1  |  |
|-------------------------------------|---|---------------|--|---------------|---|---------------|---|--|
| <b>Internal sensor</b>              | Probe type  | -             |  | <b>NTC</b>    | <b>Humidity sensor</b>                      | -             |   | 1 channel: current/voltage input   |
|                                     | Measuring range   | -             |  | -20 to +50 °C | 0 to 100 %RH <sup>1)</sup>                  | -             |   | 2-wire: 4 to 20 mA, 4-wire: 0/4 to 20 mA, 0 to 1/5/10 V, load: max. 160 Ω at 24 V DC   |
|                                     | Accuracy  | -             |  | ±0.5 °C       | ±3 %RH at +25 °C<br>±0,03 %RH/K<br>±1 digit | -             |   | Current ±0.03 mA / 0.75 µA<br>Voltage 0 to 1 V ±1.5 mV/39 µV<br>Voltage 0 to 5 V ±7.5 mV / 0.17 mV<br>Voltage 0 to 10 V ±15 mV / 0.34 mV<br>±0.02% of. m.v./K deviating from nominal temperature 22 °C |
|                                     | Resolution  | -             |  | 0.1 °C        | 0.1 °C% / 0.1 °C td                         | -             |   | -  |
| <b>External probe</b>               | Probe type  | <b>NTC</b>    | <b>Humidity sensor</b>   | -             |   | <b>NTC</b>    | <b>Humidity sensor</b>  | -  |
|                                     | Measuring range (Instrument)  | -20 to +50 °C | 0 to +100 %RH <sup>1)</sup>  | -             |   | -20 to +70 °C | 0 to +100 %RH <sup>1)</sup>   | -  |
|                                     | Accuracy (Instrument)   | ±0.5 °C       | to 90 %RH: ±2 %RH at +25 °C<br>> 90 %RH: ±3 %RH at +25 °C<br>±0,03 %RH/K<br>±1 digit | -             |   | ±0.2 °C       | see probes  | -  |
|                                     | Resolution (Instrument)   | 0.1 °C        | 0.1% / 0.1 °C td   | -             |   | 0.1 °C        | 0.1% / 0.1 °C td  | -  |
| Connection                          | non-exchangeable stump probe  |               | -  |               | 1 x external humidity probe mini DIN socket |               | 2 or 4-wire current/voltage output<br>Service interface mini DIN for adjustment |  |
| Dimensions (housing):               | 85 x 100 x 38 mm  |               | 80 x 85 x 38 mm  |               | 80 x 85 x 38 mm                             |               | Approx. 85 x 100 x 38 mm  |  |
| Weight                              | Approx. 256 g   |               | Approx. 245 g  |               | Approx. 245 g                               |               | Approx. 240 g   |  |
| Battery life (Type: 4 AA batteries) | Battery life at +25 °C, 3 years; for freezer applications, 3 years with L91 Photo lithium Energizer batteries |               |  |               |   |               | Supply: Mains unit 6.3 V DC, 20 to 30 V DC max. 25 V AC                         |  |
| Housing material                    | Plastic   |               |  |               |   |               |   |  |
| Protection class                    | IP54  |               | IP42   |               | IP54  |               |   |  |
| Radio frequency                     | 868 MHz   |               |  |               |   |               |   |  |
| Measuring rate                      | Standard 15 min, 1 min to 24 h can be set   |               |  |               |   |               |   |  |
| Memory                              | 6,000 measurement values per channel  |               |  |               |   |               |   |  |
| Operating temperature               | -20 to +50 °C   |               |  |               |   |               | +5 to +45 °C  |  |
| Storage temperature                 | -40 to +55 °C (incl. batteries)   |               |  |               |   |               | -25 to +60 °C   |  |
| Display (optional)                  | LCD, 2 lines; 7-segment with symbols  |               |  |               |   |               | (no display)  |  |
| Transmission distance               | approx. 300 m without obstruction at a frequency of 868 MHz   |               |  |               |   |               |   |  |
| Wall bracket                        | included  |               |  |               |   |               |   |  |

<sup>1)</sup> Not for condensing atmosphere. For continuous applications in high humidity (>80 %RH at ≤30 °C for >12 h, >60 %RH at >30 °C for >12h), please contact us via [www.testo.com](http://www.testo.com).

\*The testo Saveris Converter V 2.0 (order no. 0572 0218) is required for integration of testo Saveris wireless probes into systems with Base Firmware V 1.X. For more information please contact our customer hotline or your Testo partner.

# Ethernet probes

## Version with display

## Part no.

|  |           |  |
|--|-----------|--|
| testo Saveris T1 E Ethernet probe with 1 external probe connection NTC, with display           | 0572 1191 |  |
| testo Saveris T4 E 4-channel Ethernet probe with 4 external TC probe connections, with display | 0572 9194 |  |
| testo Saveris Pt E Ethernet probe with external Pt100 probe connection, with display           | 0572 7191 |  |

Mains units are not included in delivery. testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

| Technical data          | testo Saveris T1 E   | testo Saveris T4 E                                     |                  | testo Saveris Pt E   |                 |
|-------------------------|--|--|------------------|--|-----------------|
| External probe          | Probe type   | <b>NTC</b>   | <b>TC type K</b> | <b>TC type J</b>   | <b>Pt100</b>    |
|                         | Measuring range (Instrument)   | -50 to +150 °C   | -195 to +1350 °C | -100 to +750 °C  | -200 to +600 °C |
|                         |  |  | <b>TC type T</b> | <b>TC type S</b>   |                 |
|                         |  |  | -200 to +400 °C  | 0 to +1760 °C  |                 |
| Accuracy (Instrument)   | ±0.2 °C (-25 to +70 °C)<br>±0.4 °C (remaining range)                           | ±0.5 °C or 0.5% of m.v.                                |                  | at +25 °C<br>±0.1 °C (0 to +60 °C)<br>±0.2 °C (-100 to +200 °C)<br>±0.5 °C (remaining range) |                 |
| Resolution (Instrument) | 0.1 °C   | 0.1 °C / TC type S 1 °C                                |                  | 0.01 °C  |                 |
| Connection              | 1 x NTC via mini DIN socket  | 4 TCs via TC socket, max. difference in potential 50 V |                  | 1 Pt100 via mini-DIN socket  |                 |
|                         | Mini-DIN service interface for adjustment is accessible externally             |  |                  |  |                 |
| Dimensions (housing):   | Approx. 85 x 100 x 38 mm   |  |                  |  |                 |
| Weight                  | Approx. 220 g  |  |                  |  |                 |
| Power                   | 6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, PoE |  |                  |  |                 |
| Buffer battery          | Li-ion (wearing part)  |  |                  |  |                 |
| Housing material        | Plastic  |  |                  |  |                 |
| Protection class        | IP54   |  |                  |  |                 |
| Measuring rate          | 2 s to 24 h  |  |                  |  |                 |
| Memory                  | 6,000 measurement values per channel   |  |                  |  |                 |
| Operating temperature   | +5 to +45 °C   |  |                  |  |                 |
| Storage temperature     | -25 to +60 °C  |  |                  |  |                 |
| Power consumption       | PoE Class 0 (typical ≤ 3 W)  |  |                  |  |                 |
| Display                 | LCD, 2 lines; 7-segment with symbols   |  |                  |  |                 |
| Wall bracket            | included   |  |                  |  |                 |



# Ethernet probes

## Version without display

## Part no.

|  |           |
|--|-----------|
| testo Saveris U1 E Ethernet analog coupler with 1 current/voltage input, without display | 0572 3190 |
|--|-----------|

## Version with display

|   |           |
|---|-----------|
| testo Saveris H1 E Ethernet probe 1 %RH, with display                                   | 0572 6191 |
| testo Saveris H2 E Ethernet probe 2 %RH, with display                                   | 0572 6192 |
| testo Saveris H4 E Ethernet probe with external humidity probe connection, with display | 0572 6194 |

Mains units are not included in delivery. testo Saveris probes are delivered with a calibration protocol of the factory adjustment data. Calibration certificates must be ordered separately.

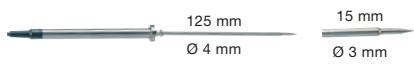
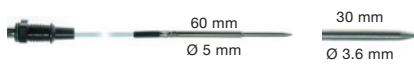
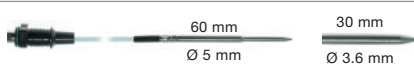





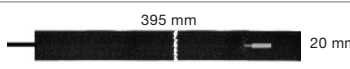
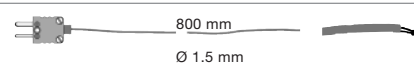
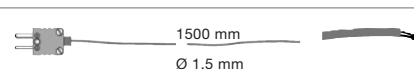
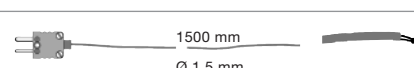

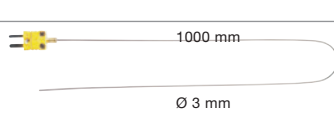
| Technical data         | testo Saveris H1 E   |  | testo Saveris H2 E  |               | testo Saveris H4 E  |  | testo Saveris U1 E               |  |
|------------------------|--|--|---|---------------|---|--|----------------------------------|--|
| <b>Internal sensor</b> | Probe type   | -  |   | -             |   | -  |                                  | 1 channel: current/voltage   |
|                        | Measuring range  | -  |   | -             |   | -  |                                  | 2-wire: 4 to 20 mA, 4-wire: 0/4 to 20 mA, 0 to 1/5/10V, load: max. 160 Ω at 24 V DC  |
|                        | Accuracy   | -  |   | -             |   | -  |                                  | Current ±0.03 mA / 0.75 μA<br>Voltage 0 to 1 V ±1.5 mV / 39 μV<br>Voltage 0 to 5 V ±7.5 mV / 0.17 mV<br>Voltage 0 to 10 V ±15 mV / 0.34 mV<br>±0.02% of. m.v./K deviating from nominal temperature 22 °C |
| <b>External probe</b>  | Probe type   | <b>NTC</b>   | <b>Humidity sensor</b>  | <b>NTC</b>    | <b>Humidity sensor</b>  | <b>NTC</b>   | <b>Humidity sensor</b>           | -  |
|                        | Measuring range (Instrument)   | -20 to +70 °C                                      | 0 to 100 %RH <sup>1)</sup>  | -20 to +70 °C | 0 to 100 %RH <sup>1)</sup>  | -20 to +70 °C  | 0 to 100 %RH <sup>1)</sup>       | -  |
|                        | Accuracy (Instrument)  | ±0.2 °C (0 to +30 °C)<br>±0.5 °C (remaining range) | to 90 %RH: ±1 %RH +0.7 % of m.v. at +25 °C<br>> 90 %RH: ±1.4 %RH +0.7 % of m.v.<br>±0.03 %RH/K<br>± 1 digit | ±0.5 °C       | to 90 %RH: ±2 %RH at +25 °C<br>> 90 %RH: ±3 %RH at +25 °C<br>±0.03 %RH/K<br>± 1 digit | ±0.2 °C  | see external probes              | -  |
|                        | Resolution (Instrument)  | 0.1 °C   | 0.1% / 0.1 °C td  | 0.1 °C        | 0.1% / 0.1 °C td  | 0.1 °C   | 0.1% / 0.1 °C td                 | -  |
| Connection             | -  |  |   |               |   | 1 x external Ethernet humidity probe mini DIN socket | 1 x 2- or 4-wire current/voltage |  |
|                        | Mini-DIN service interface is accessible externally                            |  |   |               |   |  |                                  |  |
| Dimensions (housing):  | Approx. 85 x 100 x 38 mm   |  |   |               |   |  |                                  |  |
| Weight                 | Approx. 230 g  |  |   | Approx. 254 g |   | Approx. 240 g  |                                  |  |
| Power                  | 6.3 V DC mains unit; alternatively via 24 V AC/DC plug-in/screw terminals, PoE |  |   |               |   |  |                                  |  |
| Buffer battery         | Li-ion (wearing part)  |  |   |               |   |  |                                  |  |
| Housing material       | Plastic  |  |   |               |   |  |                                  |  |
| Protection class       | IP54   |  |   |               |   |  |                                  |  |
| Measuring rate         | 2 s to 24 h  |  |   |               |   |  |                                  |  |
| Memory                 | 6,000 measurement values per channel   |  |   |               |   |  |                                  |  |
| Operating temperature  | +5 to +45 °C   |  |   |               |   |  |                                  |  |
| Storage temperature    | -25 to +60 °C  |  |   |               |   |  |                                  |  |
| Power consumption      | PoE Class 0 (typical ≤ 3 W)  |  |   |               |   |  |                                  |  |
| Display                | LCD, 2 lines; 7-segment with symbols   |  |   |               |   | no display   |                                  |  |
| Wall bracket           | included   |  |   |               |   |  |                                  |  |

<sup>1)</sup> Not for condensing atmosphere. For continuous applications in high humidity (>80 %RH at ≤30 °C for >12 h, >60 %RH at >30 °C for >12h), please contact us via [www.testo.com](http://www.testo.com).

## Sintered caps for testo Saveris H1 E, H2 E and H2 D probes

|   |           |
|---|-----------|
| Metal protection cage, Ø 12 mm for humidity probes, for measurement in flow velocities of less than 10 m/s  | 0554 0755 |
| Stainless steel sintered filter, pore size 100 μm, probe protection in dusty atmospheres or higher flow velocities, for measurements at higher flow velocities or in contaminated air | 0554 0641 |
| Cap with wire mesh filter, Ø 12 mm  | 0554 0757 |
| Sintered PTFE filter, Ø 12 mm, for corrosive media, High humidity range (long-term measurements), high flow velocities.   | 0554 0756 |
| Testo saline pots for testing and humidity calibration of humidity sensors, 11.3 %RH and 75.3 %RH, incl. adapter for humidity probes, fast testing or calibration of humidity probe   | 0554 0660 |




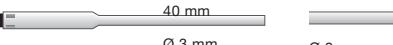
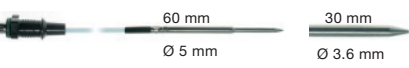

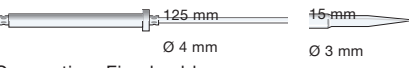
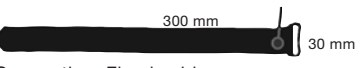
# External temperature and humidity probes

| Probe type  | Dimensions<br>Probe shaft/probe shaft tip   | Measuring range  | Accuracy  | t <sub>99</sub> | Part no.                           |
|---|---|------------------|---|-----------------|------------------------------------|
| <b>Pt100</b>  |   |                  |   |                 |                                    |
| ◆ Robust, Pt100 stainless steel food probe (IP65)   |    | -50 to +400 °C   | Class A (-50 to +300 °C), Class B (remaining range) | 10 s            | 0609 2272                          |
| ◆ Penetration probe Pt100 with ribbon cable, cable length 2 m, IP 54  |    | -85 to +150 °C   | Class A   | 35 s            | 0572 7001                          |
| ◆ Penetration probe Pt100 with ribbon cable, cable length 4 m, IP 54  |    | -200 to +200 °C  | Class A   | 35 s            | 0572 9999<br>ID no.<br>0699 7175/1 |
| Connection cable for unlimited Pt100 stationary probes (4-wire technology), Cable length: 3 m possible max. cable length: 20 m    |   |                  |   |                 | 0554 0213                          |
| <b>TC</b>   |   |                  |   |                 |                                    |
| ◆ Stationary probe with stainless steel sleeve, TC Type K   |   | -50 to +205 °C   | Class 2*  | 20 s            | 0628 7533                          |
| ◆ Penetration probe TC with ribbon cable, Type K, cable length 2 m, IP 54   |  | -40 to +220 °C   | Class 1   | 7 s             | 0572 9001                          |
| Magnetic probe, adhesive force approx. 20 N, with magnets, for measurements on metal surfaces, TC Type K                          |  | -50 to +170 °C   | Class 2*  | 150 s           | 0602 4792                          |
| Magnetic probe, adhesive force approx. 10 N, with magnets, for higher temp., for measurements on metal surfaces, TC Type K        |  | -50 to +400 °C   | Class 2*  |                 | 0602 4892                          |
| Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Meas. range short-term up to +280 °C, TC Type K   |  | -60 to +130 °C   | Class 2*  | 5 s             | 0602 4592                          |
| Pipe wrap probe with velcro strip; for temperature measurement on pipes with diameter up to max. 120 mm; Tmax. +120 °C; TC Type K |  | -50 to +120 °C   | Class 1*  | 90 s            | 0628 0020                          |
| Thermocouple with TC adapter, flexible, 800 mm long, fibre glass, TC Type K   |  | -50 to +400 °C   | Class 2*  | 5 s             | 0602 0644                          |
| Thermocouple with TC adapter, flexible, length 1500 mm, fibreglass, TC Type K   |  | -50 to +400 °C   | Class 2*  | 5 s             | 0602 0645                          |
| Thermocouple with TC adapter, flexible, 1500 mm long, PTFE, TC Type K   |  | -50 to +250 °C   | Class 2*  | 5 s             | 0602 0646                          |
| Immersion tip, flexible, TC Type K  |  | -200 to +1000 °C | Class 1*  | 5 s             | 0602 5792                          |
| Immersion measurement tip, flexible, for measurements in air/exhaust gases (not suitable for measurements in smelters), TC Type K |  | -200 to +1300 °C | Class 1*  | 4 s             | 0602 5693                          |

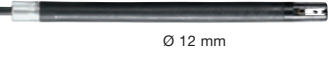

◆ The specified accuracy class of the testo Saveris radio and Ethernet probe is achieved using these external probes.

\*According to standard EN 60584-2, the accuracy of Class 1 refers to -40 to +1000 °C (Type K), Class 2 to -40 to +1200 °C (Type K), Class 3 to -200 to +40 °C (Type K).

# External temperature and humidity probes

| Probe type   | Dimensions<br>Probe shaft/probe shaft tip  | Measuring range              | Accuracy  | t <sub>99</sub> | Part no.   |
|--|--|------------------------------|---|-----------------|------------|
| <b>NTC</b>   |  |                              |   |                 |            |
| ◆ Stub probe, IP 54  |   | -20 to +70 °C                | ±0.2 °C (-20 to +40 °C)<br>±0.4 °C<br>(+40.1 to +70 °C)   | 15 s            | 0628 7510  |
| ◆ Stationary probe with aluminium sleeve, IP 65                                | <br>Connection: Fixed cable;<br>Cable/length: 2.4 m   | -30 to +90 °C                | ±0.2 °C (0 to +70 °C)<br>±0.5 °C<br>(remaining range)   | 190 s           | 0628 7503* |
| ◆ Accurate immersion/penetration probe, 6m cable, IP 67                        | <br>Connection: Fixed cable;<br>Cable/length: 6 m     | -35 to +80 °C                | ±0.2 °C<br>(-25 to +74.9 °C)<br>±0.4 °C<br>(remaining range)                                    | 5 s             | 0610 1725* |
| ◆ Accurate immersion/penetration probe, cable: 1.5 m long, IP 67               | <br>Connection: Fixed cable;<br>Cable/length: 1.5 m   | -35 to +80 °C                | ±0.2 °C<br>(-25 to +74.9 °C)<br>±0.4 °C<br>(remaining range)                                    | 5 s             | 0628 0006* |
| ◆ Penetration probe NTC with ribbon cable, cable length 2 m, IP 54             |    | -40 to +125 °C               | ±0.5 % of m.v.<br>(+100 to +125 °C)<br>±0.2 °C (-25 to +80 °C)<br>±0.4 °C<br>(remaining range)  | 8 s             | 0572 1001  |
| Wall surface temperature probe, e.g. to prove damage in building material      | <br>Connection: Fixed cable;<br>Cable/length: 3 m   | -50 to +80 °C                | ±0.2 °C<br>(-25 to +80 °C)<br>±0.5 °C<br>(-40 to -25.1 °C)                                      | 20 s            | 0628 7507  |
| ◆ Stainless steel NTC food probe (IP65) with PUR cable                         | <br>Connection: Fixed cable;<br>Cable/length: 1.6 m | -50 to +150 °C <sup>2)</sup> | ±0.5% of m.v.<br>(+100 to +150 °C)<br>±0.2 °C (-25 to +74.9 °C)<br>±0.4 °C<br>(remaining range) | 8 s             | 0613 2211* |
| Pipe wrap probe with Velcro for pipe diameter to max. 75 mm, Tmax. +75 °C, NTC | <br>Connection: Fixed cable;<br>Cable/length: 1.5 m | -50 to +70 °C                | ±0.2 °C (-25 to +70 °C)<br>±0.4 °C (-50 to -25.1 °C)  |                 | 0613 4611  |

The standard temperature probes from the Testo range can be individually tailored to your application. For more information please contact your Testo partner.

| Probe type                         | Dimensions<br>Probe shaft/probe shaft tip   | Measuring range               | Accuracy  | Part no.  |
|------------------------------------|---|-------------------------------|---|-----------|
| <b>%RH</b>                         |   |                               |   |           |
| ◆ Humidity/temperature probe 12 mm |  | -20 to +70 °C<br>0 to 100 %RH | ±0,3 °C<br>±2 %RH at +25 °C (2 to 98 %RH)<br>±0,03 %RH/K<br>± 1 digit | 0572 6172 |
| Humidity/temperature probe 4 mm    |  | 0 to +40 °C<br>0 to 100 %RH   | ±0,3 °C<br>±2 %RH at +25 °C (2 to 98 %RH)<br>±0,08 %RH/K<br>± 1 digit | 0572 6174 |

◆ The specified accuracy class of the testo Saveris radio and Ethernet probe is achieved using these external probes.

\* Probe tested to EN 12830 for suitability in the transport and storage sectors

2) Long-term measurement range +125 °C, short-term +150 °C or +140 °C (2 minutes)

# Accessories

| Power supply   | Part no.                           |
|--|------------------------------------|
| Battery for radio probe (4 AA alkali manganese mignon batteries)   | 0515 0414                          |
| Battery for radio probe for use below -10 °C (4 Energizer L91 Photo lithium)   | 0515 0572                          |
| Li-ion rechargeable battery for testo Saveris Base, Ethernet probe and testo Saveris Analog Coupler U1E  | 0515 5021                          |
| Mains unit international 100-240 V AC / 6.3 V DC for mains operation or battery charging in instrument   | 0554 1096                          |
| Power supply (top-hat rail mounting) 90 to 264 VAC / 24 VDC (2.5 A)  | 0554 1749                          |
| Power supply (desktop) 110 to 240 VAC / 24 VDC (350 mA)  | 0554 1748                          |
| <b>Other features</b>  |                                    |
| Magnetic foot aerial (dualband) with 3 m cable, for Base with GSM module (not suitable for USA, Canada, Chile, Argentina, Mexico)  | 0554 0524                          |
| Magnetic foot aerial (quadband) for Base with GSM module   | 0554 0525                          |
| Alarm module (visual + acoustic), can be connected to Base alarm relay, Ø 70 x 164 mm, 24 V AC/DC / 320 mA, perm. light: red, perm. tone: buzzer approx. 2.4 kHz (Mains unit 0554 1749 required)                     | 0572 9999<br>ID no.<br>0699 6111/1 |
| testo Saveris protective housing for the protection from heavy water jets, IP 66 K suitable for radio probes T1/T1D/T2/T2D/Pt/PtD/H4D  | 0572 0200                          |
| Testo fast printer with wireless infrared interface, 1 roll of thermal paper and 4 Mignon batteries for printing out measured values on the testo Saveris cockpit unit; operating temperature 0 ... +50 °C           | 0554 0549                          |
| Programming adapter (from Mini-DIN to USB) for Base, Ethernet probe, Converter and Extender for configuring IP addresses as well as for the adjustment of testo Saveris probes via testo Saveris adjustment software | 0440 6723                          |
| <b>Software</b>  |                                    |
| testo Saveris SBE software licence 1 user  | 0572 0180                          |
| testo Saveris PROF software licence 1-5 users incl. Web Access   | 0572 0181                          |
| testo Saveris PROF software licence 1-5 users Classic  | 0572 0192                          |
| testo Saveris PROF software licence +1 user (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))   | 0572 0190                          |
| testo Saveris PROF software licence + unlimited number of users (only in connection with the testo Saveris PROF software (order no. 0572 0181 or 0572 0192))   | 0572 9999                          |

| Software  | Part no.    |
|---|-------------|
| testo Saveris CFR software licence 1-5 users incl. Web Access   | 0572 0182   |
| testo Saveris CFR software licence +1 user (only in connection with the testo Saveris CFR software (order no. 0572 0182))   | 0572 0193   |
| testo Saveris CFR software licence + unlimited number of users (only in connection with the testo Saveris CFR software (order no. 0572 0182))                         | 0572 9999   |
| testo Saveris Web Access  | 0572 0001   |
| testo Saveris adjustment software incl. connection cable to wireless and Ethernet probes  | 0572 0183   |
| <b>Calibration Certificates</b>   |             |
| ISO calibration certificate/temperature; Temperature probes; calibration points -8 °C; 0 °C; +40 °C per channel/instrument (suitable for testo Saveris T1/T2)         | 0520 0171   |
| ISO calibration certificate/temperature; Temperature probes; calibration points -18 °C; 0 °C; +60 °C; per channel/instrument (not suitable for testo Saveris T1/T2)   | 0520 0151   |
| DAkKS calibration certificate temperature; Temperature probes; calibration points -20 °C; 0 °C; +60 °C; per channel/instrument (not suitable for testo Saveris T1/T2) | 0520 0261   |
| ISO calibration certificate humidity; Humidity probe, calibration points 11.3 %RH and 75.3 %RH at +25 °C/+77 °F; per channel/instrument                               | 0520 0076   |
| DAkKS calibration certificate humidity; Humidity probe, calibration points 11.3 %RH and 75.3 %RH at +25 °C; per channel/instrument                                    | 0520 0246   |
| <b>DAkKS application calibration</b>  |             |
| Cooling application<br>Calibration points 0 °C, +5 °C, +10 °C   | 0520 0297/K |
| Deep-freeze application<br>Calibration points -30 °C, -15 °C, 0 °C  | 0520 0297/T |
| Ultra deep-freeze application<br>Calibration points -196 °C; -80 °C; -40 °C; 0 °C   | 0520 0297/U |
| Incubator<br>Calibration points +20 °C, +37 °C, +50 °C  | 0520 0297/B |
| Ambient temperature<br>Calibration points +5 °C, +20 °C, +45 °C   | 0520 0297/R |
| <b>ISO application calibration</b>  |             |
| Cooling application<br>Calibration points 0 °C, +5 °C, +10 °C   | 0520 0097/K |
| Deep-freeze application<br>Calibration points -30 °C, -15 °C, 0 °C  | 0520 0097/T |
| Ultra deep-freeze application<br>Calibration points -196 °C; -80 °C; -40 °C; 0 °C   | 0520 0097/U |
| Incubator<br>Calibration points +20 °C, +37 °C, +50 °C  | 0520 0097/B |
| Ambient temperature<br>Calibration points +5 °C, +20 °C, +45 °C   | 0520 0097/R |

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Subject to change without notice.